

TECHNICAL DATA SHEET

Recombinant Human TGF-beta1-(CHO) (Carrier-Free)

Catalog Number: 21-9025

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human TGF-beta1-(CHO) (Carrier-Free)

DESCRIPTION

The three mammalian isoforms of TGF-beta signal through the same receptor and elicit similar biological responses. They are multifunctional cytokines that regulate cell proliferation, growth, differentiation and motility, as well as synthesis and deposition of the extracellular matrix. They are involved in various physiological processes, including embryogenesis, tissue remodeling and wound healing.

MOLECULAR MASS

Recombinant Human TGF-beta1 is a 25.0 kDa protein composed of two identical 112 amino acid polypeptide chains linked by a single disulfide bond.

AMINO ACID SEQUENCE

ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW KWIHEPKGYH ANFCLGPCPY IWSLDTQYSK VLALYNQHNP GASAAPCCVP QALEPLPIVY YVGRKPKVEQ LSNMIVRSCK CS

SOURCE

CHO cells

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Chicken, Cow, Dog, Donkey, Frog, Human, Mink, Monkey, Mouse, Pig, Rabbit, Rat

BIOACTIVITY

The ED50 was determined by TGF-beta1's ability to inhibit the mouse IL-4-dependent proliferation of mouse HT-2 cells is ≤ 0.05 ng/ml, corresponding to a specific activity of $\geq 2 \times 10^7$ units/mg.

RESEARCH AREAS

Immune System, Proliferation, TGF-beta Superfamily, Angiogenesis/Cardiovascular, Apoptosis, Inflammation, Stem Cells & Differentiation, Wound Healing, Allergy, Cancer

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Yu, H. Flt3 Ligand Promotes the Generation of a Distinct CD34+ Human Natural Killer Cell Progenitor That Responds to Interleukin-15. 1998. Blood; 92. Number 10.pp.3647-3657. Farnworth, P. G. Inhibins differentially antagonize activin and bone morphogenetic protein action in a mouse adrenocortical cell line. 2006. Endocrinology; 147(7):3462-71. Henderson, N.C. Galectin-3 regulates myofibroblast activation and hepatic fibrosis. 2006. Proceedings of the National Academy of Sciences of the USA; 103(13):5060-5.

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